

cow's milk, **not** a milk replacer specifically formulated to provide optimal nutrition for **puppies**. Further, neither Kakade nor Oftedal teach or suggest the ratio of casein and whey recited in claim 1.

The Examiner asserts that it would have been obvious to optimize the ratio of the protein mix "since the protein ratio is a result effective variable that effects[sic] the digestion and absorption in the gastrointestinal tract of a monogastric animal" as taught in Kakade. However, the Examiner has not established that the protein ratio is a result effective variable **with regard to puppies**. None of the prior art references recognize the fact that the claimed ratio of protein and whey is closest to that provided by bitch milk as taught in the present invention, nor do they teach or suggest a desire to duplicate bitch milk for the purpose of providing a milk replacer for puppies. As the claimed ratio is not recognized by any of the prior art references as a result-effective variable, the claims are not rendered obvious by the proposed combination. See *In re Antonie*, 195 USPQ 6 (CCPA 1977).

Applicant notes the Examiner's rejection of claim 2 under 35 U.S.C. §103(a) as being unpatentable over Oftedal in view of Kakade and further in view of Irvine et al. However, applicant wishes to point out that claim 2 was cancelled in the prior amendment submitted on September 28, 1999. The subject matter of claim 2 was incorporated into claim 1 as previously amended. Accordingly, applicant will respond to this ground of rejection with regard to its relevance to amended claim 1. The Examiner has relied on Example 1 of Irvine et al. which discloses a milk substitute for calves, lambs and piglets containing 17% casein and 6% whey protein, or a ratio of about 74:26. The Examiner again concludes that it would have been obvious to "optimize" the ratio of casein to whey to obtain the claimed ratio of 70:30. As previously pointed out, Irvine et al. provide no motivation to do so as they teach a milk substitute for calves, lambs and piglets, **not puppies**. The present invention provides a milk substitute which closely matches the concentrations of components found in actual bitch milk. There is no teaching in Irvine et al. which would provide any motivation to use the claimed amount of casein and whey in a milk replacer for **puppies**.

Claims 6 and 14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Oftedal and Kakade further in view of Gil et al., U.S. Patent No. 5,709,088 for the same reasons noted in the prior Office Action. The Examiner maintains that it would have been obvious to include arachidonic and docosahexaneoic acids in the formulations of Oftedal and Kakade in view of Gil et al., who teach an infant formula containing arachidonic acid and docosahexaneoic acid. Again, there is no motivation to modify Oftedal or Kakade as Gil is directed to a nutritional formula for **infants and adults, not a milk replacer for puppies**. Even if the reference teachings were combined as proposed, the claimed invention would not result as none of the references teach the claimed levels of protein or the claimed ratio of casein and whey as recited in claim 1, from which claim 6 depends.

Claims 7 and 11 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kakade, Oftedal, and Gil further in view of Traitler et al. (U.S. Patent 4,938,984). The Examiner maintains his position that it would have been obvious to add fatty acids to a milk substitute for dogs “since the fatty acids are important components in membrane lipids, as taught by Traitler.” Again, there is no motivation to modify the references in view of the teachings of Traitler et al., who teach a dietetic food or food supplement for **humans** such as infants’ milk. There is no teaching or suggestion in Traitler which would indicate to one skilled in the art that there would be any expectation of success if such fatty acids were provided in a milk substitute for **dogs**. Even if one were to combine the teachings of the references, the claimed invention would not result for the same reasons pointed out above.

Claims 8 and 12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kakade and Oftedal further in view of Kinumaki et al., U.S. Patent 4,294,856. The Examiner maintains that it would have been obvious to incorporate amino acids into an animal formula in view of Kinumaki, who teach a milk replacer for infant animals such as pigs and calves which contains amino acids. Again, as Kinumaki et al. are directed to a milk replacer for animals such as **pigs and calves**, there is no motivation to use amino acids in a milk replacer for **dogs**. Further, as claims 8 and 12 depend from claim 1, they are believed to be patentable for the same reasons stated above.

Claims 10 and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kakade and Oftedal further in view of Fujimori, U.S. Patent 5,294,458, who teaches a pet food for dogs and cats which may contain fructooligosaccharide. However, Fujimori is not directed to a **milk replacer**, but rather a **pet food**. Further, as pointed out above, neither Kakade nor Oftedal teach a milk replacer including the claimed levels of protein or the claimed ratio of casein and whey as recited in claim 1, from which claim 10 depends. Accordingly, even if the references were combined as suggested, the claimed invention would not result.

The Examiner has not carried his burden of establishing motivation to combine the teachings of the references. None of the references, taken alone or in combination, teach or suggest a milk replacer for dogs which provides nutrition which is close to that provided by actual bitch milk as taught and claimed in the present invention.

Claims 1, 3-5 and 9 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent 5,792,501 in view of Kakade and Oftedal. The Examiner has maintained his position that the claims "describe similar limitations of a composition" and that the only difference lies in their intended use. However, there is no teaching in either Kakade or Oftedal which would suggest to one skilled in the art that a milk replacer for dogs would have the same nutritional benefits if administered to a cat, or vice versa. The '501 patent teaches a composition formulated specifically for **felines** while the present invention is directed to a composition formulated specifically for **dogs**.

The Examiner maintains that the "same composition is being used for use in a canine milk replacer and a feline milk replacer". This is simply not true. While there may be some overlap in the compositions of the '501 patent and the claimed composition, it is clear from a review of the compositions that the ranges of the claimed components are different for dogs and cats (compare, e.g., the casein and whey ratio, fat content, fatty acid and amino acid content). The claimed casein and whey ratio of 1:1 in the '501 patent is clearly not equivalent to the 70:30 ratio in the present claims. Nor does the prior art suggest modifying a composition for cats to make it suitable for dogs. Accordingly, the obviousness-type double patenting rejection is believed to be improper and should be withdrawn.

Claims 2, 6-8, 10-13 and 14 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 5,792,501 in view of various combinations of Kakade and Oftedal with Irvine et al., Gil, Traitler Kinumaki, or Fujimori. These claims are believed to patentable over the '501 patent for the same reasons discussed above.

Claims 1, 3-5 and 9 have been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-36 of U.S. Patent Application 09/362,401 in view of Oftedal and Kakade al. Claims 2, 6-8, 10-13 and 14 have also been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-36 of U.S. Patent Application No. 09/362,401 in view of various combinations of Kakade and Oftedal with Irvine et al., Gil, Traitler Kinumaki, or Fujimori. Applicant is submitting herewith a properly executed terminal disclaimer which is believed to overcome these rejections.

Claims 1, 3-5 and 9 have been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-24 of U.S. Patent No. 5,882,714 in view of Oftedal and Kakade. In addition, claims 2, 6-8, 10-13 and 14 have been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-24 of U.S. Patent No. 5,882,714 in view of various combinations of Kakade and Oftedal with Irvine et al., Gil, Traitler, Kinumaki, or Fujimori. The Examiner again asserts that "the same composition is being used for use in a canine milk replacer and a feline milk replacer". However, there is no teaching or suggestion in any of the references that a feline milk replacer could be modified for use as a canine milk replacer, or vice versa. U.S. Patent No. 5,882,714 teaches a feline milk substitute comprising protein having a casein and whey ratio of 1:1, which is clearly not the same as applicant's composition which uses a ratio of 70:30. Applicant maintains that the obviousness-type double patenting rejection is believed to be improper and should be withdrawn.

IAM 498 PA
Serial No. 09/163,778

-6-

For all of the above reasons, applicant submits that claims 1 and 3-14 are patentable over the cited art of record and are in condition for allowance. Early notification of allowable subject matter is respectfully solicited.

Respectfully submitted,

KILLWORTH, GOTTMAN, HAGAN
& SCHAEFF, L.L.P.

By Susan M. Luna
Susan M. Luna
Registration No. 38,769

One Dayton Centre
One South Main Street, Suite 500
Dayton, Ohio 45402-2023
(937)223-2050
Facsimile: (937)223-0724

SML/

